

Sigmoid Evaluation

How do you check the performance

1. Consider the following test data

	phone1	phone2	phone3	phone4
Launch (within 6 months) x_1	1	0	0	1
Weight (g) x_2	0.2	0.73	0.6	0.8
Screen Size (< 5.9in) x_3	0.2	0.7	0.8	0.9
Dual sim x_4	0	1	0	0
Internal mem(>= 64gb, 4gb ram) x_5	1	0	0	0
NFC x_6	0	0	1	0
Radio x_7	1	1	1	0
Battery (mAh) x_8	0.83	0.96	0.9	0.2
Price? (k) x_9	0.34	0.4	0.6	0.1
Liked (y)	0.17	0.67	0.9	0.3
Predicted(\hat{y})	0.24	0.67	0.9	0.3

2. Calculate the Root Mean Square Error
3. $RMSE = \sqrt{\frac{1}{n} \sum_{i=1}^n (y - \hat{y})^2}$
4. Here, RMSE = 0.311, the smaller the better
5. For classification problems, set a threshold ε , such that
 - a. $(y | \hat{y} < \varepsilon) = 0$
 - b. $(y | \hat{y} \geq \varepsilon) = 1$